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## Technical Data Sheet

### Triatherm 600LP

**Product Description** – Triatherm 600LP is a **premium synthetic aromatic fluid** with **high thermal stability** and **excellent low temperature characteristics**. This unique combination allow its use for applications that require both heating and cooling capabilities as well as those under extreme cold climates where pumpability is essential. Its optimal use temperature is ranged from  $-50^{\circ}\text{F}$  ( $-45^{\circ}\text{C}$ ) up to  $600^{\circ}\text{F}$  ( $315^{\circ}\text{C}$ ).

Triatherm 600LP has an overall **higher heat transfer efficiency and cooling capacity** than traditional synthetic heat transfer fluids or hot oils. As the result of its low viscosity, Triatherm 600LP allows a more precise and quick dialing of desired operation temperatures for improved system performance and provides the ideal cooling, for instance, for exothermic type reactions. Triatherm 600LP has an outstanding low temperature fluidity ( $-50^{\circ}\text{F}$ ) that provides **the necessary pumpability** for operations even under arctic weather conditions.

Triatherm 600LP is ideal for heat transfer applications use in a wide variety of industries:

- Oil & gas processing
- chemical manufacturing
- pharmaceuticals manufacturing
- Dual heating and cooling operations

#### ***Recommended optimum use temperature range***

**Liquid phase:  $-50^{\circ}\text{F}$  up to  $600^{\circ}\text{F}$  ( $-45^{\circ}\text{C}$  up to  $315^{\circ}\text{C}$ )**

The data presented herein are believed to be accurate; however, Pacific Fluids shall not be liable for its content and makes no warranty with respect thereto. Because the conditions of the intended use varies and may differ from time to time and beyond our control, the recipient(s) shall verify the claims herein and verify its suitability of purpose prior to use. In no event shall Pacific Fluids be responsible for damages of any nature resulting from the use of or reliance upon the information, or the product that conforms to the specification(s)

## Typical Properties

Property	Typical Analysis	
Maximum bulk operating temp	°F (°C)	600 (315)
Maximum film temp	°F (°C)	650 (343)
Odor	Inspection	Mild
Color	D1500	Lt 0.5
Appearance	Inspection	light yellow clear liquid
Pour point, °C	D97	< -60
Pumpability @ 300 mm <sup>2</sup> /s (cSt)	°F (°C)	-56 (-49)
Kinematic viscosity, cSt @ 40°C	D445	4.07
Moisture content, ppm	E-230	50
Flash Point, COC, °C	D92	145
Fire Point, °C	D92	150
Autoignition temperature, °C	E-659	405
Initial boiling point, °C	ASTM D2887	270
Heat of vaporization @ 290°C		225 KJ/Kg
Average molecular weight		210
Gravity @ 15C		0.97

*Typical product data are given. These data do not constitute a supply specification.*

## Product Features

**Proven performance** - Triatherm 600LP has very high thermal stability for an organic heat transfer fluid. It combines exceptional thermal stability and low viscosity for efficient and dependable performance in liquid phase up to 600°F.

**Interchangeability** – Triatherm 600LP is miscible and interchangeable (for top-up or design purposes) with other similarly and chemically substituted synthetic alkylated aromatic fluids. *It must not be used/mixed with heat transfer fluids of different chemical classes. Please contact your Triatherm sales representative for a proper recommendation.*

**Low temperature considerations** – Triatherm 600LP is fluid with <-60°C pour point, which results in excellent low temperature fluidity that allows for very low start up temperatures and virtually eliminates the need for heat tracing.

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### **Application and operation Notes**

Triatherm 600LP is used in controlled distillation, oil & gas processing chemical manufacturing, pharmaceuticals manufacturing and other industries where uniform and consistent heat transfer operations up to 600°F are required. Care must also be taken to prevent, inspect, and repair leaks from pipes, valves, etc., that may be potentially flammable, and can self ignite under sufficiently high temperatures. Good safety practice in design, maintenance and operation can circumvent the potential hazards as described.

### **Health, safety handling and disposal**

Please consult the Material Safety Data Sheet (MSDS) with regard to Triatherm 600LP's health and safety handling guidelines. Triatherm 600LP does not present an appreciable health hazard when used in accordance with the necessary precautions/handling procedures given in the MSDS. Although no serious pollution hazards exist, provisions must be made to prevent discharge into public waters. In addition, disposal must be in accordance with applicable Federal, State and Local regulations.

**Availability** – Triatherm 600LP is available in 55-gallon drums, totes, and bulk tank truck quantities.

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